TUBERCULOSIS NURSING

for PUBLIC HEALTH NURSES

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Tuberculosis Nursing *for* Public Health Nurses

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foreword

A SOUND tuberculosis nursing program must be founded on the fundamental principles of public health nursing. The application of these principles may vary with local community situations. The suggestions in this pamphlet are offered in the hope that they may serve as a guide to nurses working in communities where no definite program has been outlined, and where much of the success of tuberculosis work depends upon the application of sound procedures and techniques acceptable to other agencies and members of the community. The nurse is not advised to substitute any of the methods suggested if there already exists a program carried out either by a private or official agency, unless the agency itself is convinced of the wisdom of a change, and the suggested method offers advantages over the one in use.

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Relation of Private to Official Agency

TUBERCULOSIS is a communicable disease which directly concerns the welfare of every member of the community. The responsibility for the protection of the health of the community rests with the local health department and tuberculosis, therefore, legitimately belongs to this group. However, in most communities the work of this department is still supplemented by private agencies and, in not a few, the entire nursing service is supplied by private nursing associations. In either situation the closest cooperation, based upon an understanding of the aims and activities of each agency, is essential.

The standards of the private agency should conform to the requirements of the local sanitary code.

It is highly desirable that the policies and procedures of the nursing service be approved by the local physicians and medical society.

The support and sanction of the health department should be sought in all *new* projects which the private agency is undertaking.

Criticism should be withheld until it can be accompanied by a constructive suggestion which offers a more desirable and effective method of carrying on the program.

Frequent conferences between the workers of both groups tend to lessen the possibility of misunderstandings.

The department of health should be enlisted in dealing with the incorrigible case who is not amenable to the measures employed by the private agency in protecting the health of other members of the family and the community. It is sometimes well to remember that the health officer is handicapped by antiquated or inadequate laws in carrying out what might seem to be the proper preventive measures.

Monthly reports to the health officer of the activities of the private agency assist in providing him with a more complete picture of the measures employed, together with their results, in the anti-tuberculosis program of the community. This is also an effective way of justifying financial support for the continuance and transfer of certain activities initiated by the private agency to the official agency.

Tuberculosis in a Community Nursing Program

THE family is the unit of work in tuberculosis nursing. The physical, mental, social, and economic problems of the family have a very definite relation to the tuberculosis problem. Consequently we find the tuberculous family offers an ideal field for the functioning of a generalized nursing program. The aim of the public health nurse should be the correction of all handicaps which hinder the family in properly functioning as a unit in the community. Cooperation with other health and social agencies is necessary in bringing about such a family adjustment.

A generalized nursing service provides ample opportunity for making a special contribution to the anti-tuberculosis program by means of *case-finding*. The nurse who has an awakened sense of responsibility for the health of the community will be on the alert for symptoms and information that may lead her to suspect the presence of tuberculosis. Child hygiene, maternity, communicable disease, and other phases of family health work open the doors to many homes where the otherwise unsuspected case might not be discovered until much damage has been done.

THE SPECIALIZED TUBERCULOSIS NURSE

The nurse who is doing tuberculosis nursing only must of necessity have a point of view broad enough to appreciate the importance of the services of other public health nursing agencies. From time to time, the tuberculous family is in need

of bedside care for pneumonia, maternity service, supervision of other communicable diseases, demonstration of a formula, mental hygiene supervision, and all other conditions found in the nontuberculous family. At such times only the closest co-operation between the nursing groups will ensure to the family the kind of care essential to physical and mental welfare. The adoption of a written policy by both groups is perhaps the safest way of avoiding misunderstanding and duplication of services.

During the period when the nurse is visiting the family for care other than tuberculosis, the tuberculosis nurse could discontinue her visits, giving the attending nurse such information on the tuberculosis situation as will be helpful to her in supervising the health of the family. When the need for special service has terminated, the tuberculosis nurse should be notified to this effect. Such intercommunication should preferably be in writing on special forms adopted for this purpose.

THE RURAL NURSE

The phase of public health nursing which calls especially for teaching and administrative ability on the part of the nurse is rural nursing. Great distances between cases, difficulties in transportation, and the large area to be covered make it impossible to visit cases as frequently as in services where these difficulties do not exist. It is, therefore, most important that effective teaching be done on each visit and that *written instructions be left in the home* as a check for the family between the nurse's visits.

A written daily schedule for the patient covering such important points as rest, fresh air, diet and exercise would be helpful to the family.

A responsible member of the family or relative should be taught how to give bedside care in the nurse's absence and given responsibility for supervision of general hygiene of the entire family.

Material relief for the family should be given by the private or official relief agency. If the family is known to a private social agency, it should be referred to the same agency for assistance. If the problem appears to be one of material relief only and there is no private agency, the family should be referred to the appropriate local official body. Where there is neither a private nor an official agency from whom relief may be obtained, the nurse may delegate this responsibility to a small sub-committee composed of members of the Nursing Committee. The nurse should have supervision over the activities of this group. In the selection of members, it is extremely important that only those individuals be chosen who have a sincere but *objective* interest in the rehabilitation of the family as a part of a community health program. The same ethical procedure observed by physician and nurse in keeping inviolate all confidences must be safeguarded. Instruction in this and the other simple fundamental procedures of case work should be the responsibility of the nurse. The object in developing such a volunteer service should be to stimulate interest in the organization of a social service with a trained worker as a part of the community health and social machinery. It should never be an end in itself.

Problems of desertion, illegitimacy, etc., should be referred to the proper local official authorities. In many states there is a child-placing agency whose activities are extended to the entire state.

THE SCHOOL NURSE

Since the family should be considered as a unit in tuberculosis nursing, this unity should be maintained and the quality of service remain unimpaired when it is necessary to delegate certain problems to a special worker. This is particularly true in the relationship of the nurse doing tuberculosis work to the school nurse. Diseased tonsils, defective teeth, and malnutrition, are problems of equal importance to both. Combined efforts will be more productive than individual effort. A policy such as the following may be helpful to both groups:

When a recommendation is made at the tuberculosis clinic for

the correction of any defects which necessitate absence from school, the correction of defects in environment other than the home, or any special services which the school is prepared to render (mid-morning lunches, open-air classes, special classes, dental service), a report should be sent by the clinic to the supervisor of school nurses, requesting her assistance.

The follow-up work in the home may be continued by the generalized nurse but the final arrangement for the correction of defects (other than hospitalization for tuberculosis) should be left to the school nurse. This does not mean that the school nurse should omit all home visiting. It is essential, however, that there be no conflict with the advice given by the visiting nurse. This can be avoided if both groups of nurses are familiar with the objectives of each service, the needs of each family as a whole, and the general public health nursing principles and procedures underlying the administration of the nursing service. An occasional conference of all nurses interested in the rehabilitation of the family will lessen the possibility of variation of advice given.

When tuberculin testing is a routine procedure in the medical-supervision program of the school, a positive reaction should be followed up in the home in an effort to ascertain the source of the infection. It is thus possible to discover unknown cases of tuberculosis in the community and to guide them to medical care which may prevent further infection of the child.

THE INDUSTRIAL NURSE

It would be difficult to overestimate the contribution which the industrial nurse can make to the anti-tuberculosis program. Her work is primarily with the adult group in which is found the highest mortality rate of this disease. Prevention of tuberculosis in this group means not only a greater degree of physical well-being for the individual, but a greater earning capacity as well, both of which influence home conditions.

Finding the early case may mean not only a cure for the patient but the prevention of infection of other members of the family. The follow-up work in the home is one of the most important steps in tuberculosis prevention. Examination

and supervision of contacts, instruction in personal and home hygiene, and obtaining assistance in the solution of social and economic problems are paramount measures in the rehabilitation of the home in which tuberculosis is found.

If the nursing personnel of the industry is prepared to give this type of supervision over a period of years, the procedures as outlined in the following pages may be employed. If the work of the nurse is confined to the industry, the supervision of the home may be referred to the proper agency in the community.

By the application of a few of the principles of cooperation outlined, it is possible to attain not only a smooth working relationship between the nurse in industry and other health agencies in the community, but a better and more complete piece of family and community health work as well.

Significant opportunities for strengthening the health program of industry as related to tuberculosis are:

Case-finding by means of: (a) physical examination; (b) health history; (c) observation of symptoms.

Assistance in obtaining adequate medical supervision other than that supplied by industry (upon recommendation of plant physician).

Cooperation with community health and social agencies in the application of rehabilitative measures.

Supervision of the ex-sanatorium case in the plant (diet, exercise, etc.).

Supervision of the underweight workers (at the request of the physician).

Taking afternoon temperatures at the request of the physician.

General instruction of all workers in the fundamental principles of personal hygiene—diet, rest, exercise, fresh air, sunshine, disposal of sputum, etc.

THE NUTRITIONIST

A nutrition worker can be of invaluable service to the pub-

lic health nurse in making a plan for the tuberculous family with an inadequate income. A budget analysis is the first step in making a family plan.

Where the services of a nutrition worker are not available, the nurse can make an approximate estimate of the family needs by including an allowance for rent, food, clothing, heat, light, laundry, church, tobacco (if allowance is not made another item will suffer), and recreation. On the basis of food prices in the local community, and the caloric requirements of different age groups of each sex, the nurse may draft a scale by which to make the necessary allowance for food and an estimate for her respective families. An extra allowance of 10 per cent should be made for underweight children.

The following are situations which may require correction in dealing with the problems of malnutrition and underweight:

(a) inadequate income; (b) inadequate allowance of income for food; (c) improperly balanced diets; (d) inexperience in methods of cooking; (e) monotony in methods of food preparation.

THE SOCIAL WORKER

Situations frequently arise in the home which call for the aid of a social agency. The following are examples: desertion, non-support, delinquency, unemployment, inadequate income, cruelty.

In communities with fairly adequate provision for the solution of such problems, the following procedure is suggested as an "instrument" for cooperation with family case work and relief agencies.

Use of Social Service Exchange. Clear all clinic cases. Clear all other cases where there is evidence of a social problem (see above). Use Social Service Exchange forms for this purpose. Note report of Exchange on family folder or record containing family data.

Selection of Social Agency. Refer problem to agency to whom family has been previously known. If unknown to any social agency, refer to the agency whose policies and activities would seem to cover the situation most adequately.

Reporting. There is less possibility of misunderstanding if the reports of the nursing and social agencies are made in writing. On a special blank form, to be shown later, give sufficient information on the family and the nature of the problem so that the social agency can decide whether or not the situation demands immediate attention, and what plan is indicated to provide for the health as well as the social needs of the family. The report should be sent to the director of the social agency and not to the individual case worker. Any written report received from the social agency should be copied on the family record (preferably a family folder). A less detailed report form may be used in referring a family from one nursing organization to another.

Case conferences are indicated in all difficult situations.

Relief Giving. As a general policy, relief (other than that properly classifiable as medical, such as milk and cod liver oil) should not be given by the nurse. Every effort should be made to have the necessary relief given by some qualified social work agency other than the nursing service. However, in view of the readjustments that have been necessary in our social and economic order, the exigencies of the situation in a given community may call for flexibility in the application of this policy, in order that the basic needs of the family can be met with as great a degree of satisfaction as is possible. This is fundamental in any program of health and oftentimes is a prerequisite to carrying out the nursing program.

In rural and small town services, without the more complete machinery of the city for handling social problems, much of the contact between nurse and social worker will be in person. In each instance, it is advisable to make a note of each interview on the family record. This makes for greater accuracy and insures continuity of the family picture. See page 9, "The Rural Nurse."

THE PRIVATE PHYSICIAN'S CASE

A strict observance of the proper ethical relationship between the physician and nurse will, in most instances, avoid many of the difficulties which seem to arise in caring for the

case under the care of the private physician. A brief statement of the prerogatives of the physician and the nurse in the tuberculosis program of the community may be of value:

The Physician:—(a) Making or changing the diagnosis; (b) reporting case to department of health; (c) prescribing treatment, including sanatorium and home care; (d) giving orders for sputum or X-ray examinations.

The Nurse:—(a) Accept *attending* physician's diagnosis for her records; (b) report only such cases to department of health as "suspicious" when there is no physician on the case and all efforts have failed to convince the patient of the need for examination; (c) follow the physician's outline of treatment and instruct patient and family to do likewise.

Reporting. The responsibility for securing satisfactory reporting of cases belongs to the department of health. It is not the duty of the nurse to check up on the physician in this matter. If the patient changes physicians and a different diagnosis is made, the nurse should accept it without questioning. Reporting a change in diagnosis is not her duty.

COOPERATION WITH THE PHYSICIAN

If the nurse is visiting the patient at the request of some one other than a physician, the same policy should be employed as in other cases of illness requiring nursing service. A physician's services should be secured and a diagnosis and outline of treatment obtained after the first visit.

If the physician is a newcomer in the community or has not used the nursing service very extensively, an occasional visit to his office will give the nurse an opportunity to explain the nature of her service and the ways in which such service may be used by the physician. A personal visit, rather than a telephone conversation, is always preferable when there has

been a misunderstanding on the part of the nurse or physician.

Before suggesting the clinic for the examination of contacts in the family, the nurse should find out if the physician has made the examination; and, if not, if he would be willing to have them examined at the clinic. If the latter, the nurse should arrange to have a report of the physical findings of each child sent directly to the physician by the clinic.

If home treatment has been recommended by the physician and the nurse finds, after a few visits, that it is impossible to arrange such care for the patient and at the same time protect other members of the family from infection, a conference should be arranged with the physician and the entire situation carefully explained.

Under no condition should sanatorium care be suggested to the patient by the nurse, until such a recommendation has first been made by the physician in attendance.

NOTE—Whether the above procedures are carried out by the staff nurse or supervisor would depend entirely upon the policy of the organization in such matters.

Whatever differences there may be from time to time in the diagnosis of the patient's condition through change of physicians, there may still be continuity in the nurse's teaching. Rest, fresh air, proper food, sunshine, and the proper disposal of sputum are hygienic measures not limited to tuberculosis but equally applicable to colds, bronchitis, pneumonia, and malnutrition.

The same fundamental principles should guide the nurse in her relationship with the physician as apply in other nursing services. Changes in the patient's condition and service rendered should be reported to the physician (in writing or verbally) at sufficiently frequent intervals to insure proper integration of the nursing and medical supervision.

Case-Finding

CASE-FINDING is one of the most important contributions a nurse can make to the program of tuberculosis prevention. A history of intimate and prolonged or frequently repeated exposure, the presence of symptoms characteristic of the disease, indicate the need of a physical examination. In suggesting the need of such an examination to the individual, the nurse should bear in mind that the presence of symptoms *merely indicates the possibility of an abnormal physical condition* and in no wise the presence of tuberculosis. Even if the examination reveals an abnormal heart or other condition, rather than tuberculosis, she may still feel her rôle in disease prevention is worth while.

Case-finding in public health nursing does not mean being "tuberculosis-minded." On the contrary, it implies being health-minded, a much more inclusive attitude. This, in turn, indicates a sensitivity to the presence of all abnormal conditions (physical, mental, and social) which suggest a deviation from normal health. Such a "health consciousness" is a basic requirement in finding tuberculosis. It will further result in bringing under medical care other conditions which lower the individual's resistance to infection, potential or known, or which in themselves constitute a health hazard to the individual or the community. With health as a goal, morbidity, maternity, and health services to all age groups (home, school, and place of work) will yield their contribution to finding the potential and obvious cases of tuberculosis which are, as yet, unknown.

SYMPTOMS

Diagnostic Standards, edition 1935, classifies tuberculosis

according to the childhood type and the adult type. Some writers use the terms "first infection" and "reinfection" type of tuberculosis. The childhood type is characterized by the initial or primary lesion located usually near the periphery of the lung and the involvement of the associated tracheobronchial lymph nodes. The symptoms are inconstant and variable and probably in the majority of cases, entirely absent. Lack of appetite, underweight, or failure to gain in a normal way (tuberculosis may be found in overweight or average weight children), fatigue, listlessness, extreme nervous irritability and restlessness and cough may be noted, but none is conclusive. To make a diagnosis, the tuberculin test and the X-ray are necessary.

Tuberculous Cervical Adenitis. Enlargement of the cervical glands may take place following or during a number of conditions such as the acute infectious diseases of childhood, eczema, irritation of ear and scalp, carious teeth, chronic tonsil infections. As a rule, an enlargement due to a tuberculous infection is one that has persisted over a period of several months. The enlargement may be accompanied by certain constitutional symptoms such as anemia, malnutrition, fever, rapid pulse, loss of weight and strength.

Tuberculosis of the Bone. Pasteurization of milk has largely eliminated tuberculosis of the bone as a factor in the anti-tuberculosis program in areas where this preventive measure is praticed. However, in communities where herds are not regularly tuberculin tested and raw milk is used, the nurse may still find children with symptoms of tuberculosis of the bones and joints. The most common symptoms are pain, persistent swelling of the joint, faulty posture, and limping.

Adult Tuberculosis. The adult type of pulmonary tuberculosis involves the parenchyma of the lungs. The classifications of Minimal, Moderately Advanced, and Far Advanced depend upon the extent of the pulmonary lesion and can be determined only by a medical examination. The symptoms vary considerably in each classification both as to number and severity. The symptoms most commonly found are: cough which has persisted six weeks or more, loss of weight, fatigue, indigestion, expectoration, night sweats, fever, pain in chest, persistent hoarseness or huskiness, hemorrhage. The first symptom *may* be hemorrhage.

The term "childhood type tuberculosis" is gradually losing favor and the tendency now is to view the disease in its entirety from first infection onward to far advanced tuberculosis, making no sharp distinction between childhood and adult types. This means that what is important is the sequence of events and the determination of the particular status of the disease in its course.

Visiting

THE frequency of the nurse's visits to a tuberculous patient should be based on the conditions found in each case. Home conditions and the physician's findings should be the nurse's guide for visiting. The following factors determine the length of time that should elapse between visits:

Generalized or Specialized Service. In the former service it is normally expected that visits will be necessary for service other than tuberculosis. Morbidity, prenatal and post-partum care would necessitate frequent visiting over such periods. A child hygiene program may mean a minimum of one visit per month. In each instance, the family continues as the unit of the nurse's visit and advice will be

given to cover the needs of each member of the family. Naturally this would include the problem of tuberculosis.

Supervision of Contacts. Many problems arise in the supervision of contacts which necessitate frequent and intensive visiting for their correction.

Intelligence. Some families are able to grasp the nurse's message in less time than others.

Economic Status. An adequate income eliminates the necessity for many visits that would otherwise be necessary to provide for the family needs.

Nurse as Teacher. All nurses do not possess the same degree of teaching ability. One nurse may make six visits before convincing the patient of the need for sanatorium care while another nurse may succeed on the first visit.

SCHEDULE OF VISITING

A schedule of visiting is valuable to a supervisor in checking up on the quantity of service rendered to the tuberculous patient. Under supervision it may be of real service in a nursing program. It serves as a check to the individual nurse to meet the minimum requirements of the tuberculosis service. There are real objections to its use when it becomes *the* criterion for efficient service in the mind of the individual nurse, particularly the less experienced one. To illustrate:

If it is the policy of the organization to visit active cases weekly, she might comply with this ruling, without exception, on all cases; whereas, there may be no need for strict observance of this ruling when the family consists of patient and his wife, income more than adequate, home conditions ideal, excellent care being given by the wife, the case a "closed" one and under close supervision of the family physician.

On the other hand, more frequent visiting may be indicated where there is not the same degree of intelligence and full cooperation in

carrying out instructions. Daily visits may be advisable during the learning period when the nurse is teaching proper care to the patient and family. A mother with active tuberculosis and a three-months'-old baby may require daily visits in order to safeguard the health of both. The same case, after removal of the baby from the home, might be adequately served with less frequent visits.

What to Teach

TEACHING implies not merely telling the patient and family what to do, but explaining clearly and simply *how* and *why* it should be done. Even as the disease itself is a matter of concern to the entire family, the teaching must likewise include every member of the family.

Teach Slowly. If the nurse has succeeded in teaching the proper disposal of sputum in one visit, so that the patient knows not only *what* to do but understands *why* he is doing it, she may consider that visit most worth while.

Motivation. Only when the patient and family have displayed tangible evidence of having *learned* can the nurse be certain that she has taught. Number of visits and repetition of the principles of personal hygiene and the value of examination are inadequate criteria of satisfactory nursing service. When the patient and family have actually *acted* upon this advice and effected changes in their mode of living, visited the family physician or clinic, and carried out the preliminary arrangements for sanatorium care—then the nurse can be reasonably certain that an important phase of the learning process has been entered into, and that she has *taught.*

Review Instructions Given. This not only reminds the family of what is expected of them but gives the nurse an opportunity to determine the effectiveness of her teaching methods. An occasional *word of commendation* to the patient and family is a great incentive to following the nurse's instructions.

ABOUT THE DISEASE

Tuberculosis is a communicable disease caused by the tubercle bacillus. The bacillus is found in the discharges from the tuberculous lesion, *e.g.*, sputum, or discharge from a gland or sinus in a bone.

Tuberculosis is preventable; it is curable if taken in time. It is not inherited. Individuals may be *infected* with the tubercle bacillus and not have active tuberculosis. Infants and young children are particularly susceptible in that they have little or no resistance to the disease.

Acquiring the disease depends upon a number of factors; the most important are: the amount or frequency of infection received, resistance of the body, and methods of living (rest, adequate food, fresh air, sunshine).

PREVENTION OF INFECTION

Prevention of infection of other individuals depends upon the proper disposal of all discharges from tuberculous lesions.

Sputum should be received in a paper napkin, or squares of toilet paper, placed in a paper bag and burned.

Surgical technique should be employed in dressing a discharging gland or bone. All soiled dressings should be burned.

The patient should wash his hands frequently, and *always* before eating.

The patient, and all other members of the family, should be taught to cover the nose and mouth with a paper napkin or handkerchief when coughing or sneezing, and to keep everything out of the mouth except food and toothbrush. Each member of the family should have his own toothbrush.

Kissing is a direct method of transferring tubercle bacilli from the patient to another person.

Flies should be kept out of the patient's room.

Only milk that has been pasteurized or boiled, or that comes from herds regularly tuberculin tested, should be used.

Small children should not come in contact with an open case of tuberculosis.

ATTITUDE TOWARD TUBERCULOSIS

Familiarity with the disease process, and preventive and curative methods are basic requirements in assuring a scientific attitude toward tuberculosis. This attitude can only be shared if the nurse has this knowledge. Courage and will-power are indispensable allies to the patient for whom recovery depends upon a radical readjustment of his mode of living. These, in turn, can be derived from an intelligent understanding of the factors underlying treatment. Fear has no place in a tuberculosis program of the highest order. Whenever found, it should be speedily displaced by knowledge.

The Problem of Contacts

EXAMINATION of all individuals who have been in contact with an open case of tuberculosis is one of the most successful ways of finding the early case for whom so much can be done.

When the diagnosed case is the *father* or *mother,* all other members of the family should be examined.

When the diagnosed case is a *child,* all other members of the family should be examined. In such instances, the parents are examined to determine the possibility of their being the source of the child's infection and to give whatever supervision may be indicated.

Strictly speaking, the brothers and sisters of a child with glandular tuberculosis (closed) are not contacts to this child. However, it is permissible to consider them as contacts until they have been examined and physical findings are reported negative. There is always the possibility that all were exposed to the same source of infection.

In a family where there is a tuberculosis suspect, the other members are not considered as contacts until the suspect has been diagnosed tuberculous.

RULES OF HYGIENE FOR CONTACTS

Prevention of further infection and *building up the resistance of the body* are the two ways by which the development of tuberculosis may be prevented where there has been infection with the tubercle bacillus.

Further infection may be prevented by providing adequate care for the open case at the sanatorium or in the home, preferably the former. In instances where it seems impossible to persuade the patient to accept sanatorium care and where home conditions are such that safety from infection cannot be assured young children, provision should be made for the care of the children outside the home. This alternative should be employed only in very exceptional cases.

The following are the most important factors in building up the bodily resistance of contact children:

Correction of all physical defects, thereby making the child "free to gain."

Hygienic Habits

Sufficient food of the right kind.
Outdoor play each day.
Proper amount of sleep and rest.
Washing hands and face before eating.
Daily care of the teeth.
Full bath more than once a week.
Daily bowel movement.
Plenty of water every day.
A quart of milk per day but no tea or coffee.

Nursing Procedures and Techniques

Bag Equipment

For advisory service only; a more complete equipment is necessary in a generalized service.

Rectal thermometer	Apron
Mouth thermometer	Applicators
Green soap	Tongue depressors
Alcohol	Record forms
Vaseline	Note book
Liquid soap	Scratch pad
Hand-brush	Pen and pencil
Paper towels	Literature
Cotton	Paper napkins

Thermometer Technique. Cleanse thermometer with pledget of cotton, moistened with green soap, using rotary motion from distal end to tip of the thermometer. Repeat process with piece of cotton moistened with alcohol. Rinse under running water. Take temperature, allowing the thermometer to remain in the patient's mouth at least *five* minutes. Read thermometer. Repeat cleansing process, dry thermometer thoroughly and return to thermometer case. Record temperature. Place soiled cotton in paper bag and burn. Use this opportunity to demonstrate thermometer technique to the patient and to a responsible member of the family.

Take temperature by rectum in children under 10 years and very ill patients. An axillary temperature is too inaccurate to use in tuberculosis work.

In cold weather, when the patient has been out of doors, allow patient to remain indoors for at least thirty minutes before taking the temperature. Be sure patient has not had anything hot or cold to drink shortly before taking the temperature.

TEMPERATURE AND PULSE

Positive Case. The temperature and pulse are very important in tuberculosis work. They may assist the physician in making a diagnosis. In a measure they help to determine the presence and degree of activity of the tuberculous lesion. The need for accuracy in taking a temperature is self-evident when even one-

fifth of a degree may be significant in the diagnosis and treatment of the disease. In active tuberculosis, an elevation in the afternoon temperature is characteristic. The morning temperature is usually normal or subnormal. Visits should be so arranged that an occasional afternoon temperature may be taken by the nurse.

Suspect. An afternoon temperature is important in suspect cases. It may help the physician to make a final diagnosis. If there is a slight elevation the first day, the temperature should be taken for three successive days. The first elevation may be due to some other abnormal physical condition, such as a cold.

Contact. The same procedure should be adopted in contact children as in suspect cases. Take the temperature when abnormal symptoms are present such as fatigue, loss of appetite, cough, etc.

EMERGENCIES

Hemorrhage

Expectorated blood of a teaspoonful or more should be considered a hemorrhage.

Call physician. Reassure the family that a hemorrhage that is not immediately fatal can usually be controlled.

Place patient in semi-reclining position (do not bother to undress). Patient may be allowed to suck ice.

The patient should remain quiet in bed for a period of 7 to 10 days.

Keep the room well ventilated and cool and the patient comfortably warm. Reassure patient at all times, and exclude visitors.

Spontaneous Pneumothorax

Symptoms: Sudden sharp agonizing pain in the chest; acute dyspnoea; cyanosis; cold, clammy extremities and other symptoms of shock.

Call physician, keep patient quiet, and apply external heat.

GENERAL CARE OF BED PATIENT

The sanatorium is the ideal place for the majority of tuberculosis patients. Every effort should be made by the nurse to provide such care when ordered by the attending physician. However, there are a few instances when the patient can "cure" satisfactorily at home under the supervision of the physician and nurse.

Where there is a responsible person in the home who is able and willing to give daily care, the nurse may teach the following technique of bed care:

THE BATH

The room should be warm and the following articles ready before beginning the bath:

- Wash basin
- Plenty of hot water
- Pitcher of cold water
- Pail for waste water (unless bathroom is convenient)
- Soap
- Glass with mouth wash (normal saline is good)
- Alcohol for rubbing
- Newspapers
- Face and bath towel
- 2 wash cloths
- Clean clothing and linen
- Toothbrush
- Cotton applicators (to be used when gums are sore)

(Keep articles for bath separately, preferably in patient's room.)

Procedure. Cover patient with blanket. Remove upper bedclothes, fold, place on chair. Use plenty of soap and hot water; rinse thoroughly. Wash face, neck, ears. Then bathe anterior chest before the upper extremities. After turning patient, bathe back. Then lower extremities and perineum. Change water as often as necessary. Avoid unnecessary exposure of patient. Empty water in toilet (indoor or outdoor)—never in the kitchen sink. Make bed.

Pressure Spots. Give special attention to back, heels, elbows

and other pressure spots. Prevent pressure sores by the use of rings, pillows, bed cradle, change of position, keeping bed free from wrinkles and crumbs, and keeping the patient clean and dry.

Care of the Teeth. If possible, have patient use a toothbrush. If gums are sore, use applicators with cotton. Tooth paste, powder, or ivory soap, may be used. Have patient expectorate in a receptacle which can be boiled or burned. Empty discharge into toilet.

Care of the Nails. Clean with nail file or toothpick wrapped with cotton.

Care of the Hair. Protect pillow with towel when combing patient's hair. Short hair is a great comfort to the patient.

Disposal of Sputum. Attach paper bag to side of bed and place paper napkins or squares of toilet paper in convenient place for patient.

Soiled Linen. Place in covered receptacle, remove from room and boil.

HOME INSTRUCTIONS

To Patient:

Cover mouth and nose with paper napkin when coughing or sneezing. Expectorate in paper napkin or squares of toilet paper and place in paper bag by the side of the bed.

Wash hands frequently and always before eating.

Rest as quietly as possible at all times but especially from 1 to 3 in the afternoon.

Follow physician's orders.

Instructions to a Member of the Family responsible for the Patient's care in the Nurse's Absence:

Explain various steps in bed care, giving reason for each procedure.

Teach how to take temperature and read thermometer.
Rinse thermometer in clean water before using. Cleanse thoroughly with soap and water after using and keep in alcohol.
Keep thermometer out of the reach of children.
Wash patient's toothbrush thoroughly in warm water and soap daily and expose to the direct rays of the sun. If obtainable, use a brush that can be boiled.
Teach ways of preparing and serving food in an attractive manner.
Show how to ventilate without draughts.
Explain ways of cleaning the room without raising dust.
Wash patient's bed weekly with soap and water.
Destroy discharges by burning.
Wash hands after caring for patient.
Allow no visitors between 1 and 3 P.M. or in the evening. (If the patient is running a temperature, it is likely to be highest at this time and rest is most important.)
Keep children out of the patient's room.
Burn all food left over on patient's tray.
Boil patient's dishes and keep them in the room or in a separate place in the pantry.
Keep in patient's room all utensils used in giving care.

The nurse should return on the following day to observe the bath, given in a return demonstration, by the person to whom the care of the patient has been delegated.

GENERAL HYGIENE

Rest, proper food, fresh air and sunshine are the principal means known at the present time for the prevention and cure of tuberculosis.

Rest. Rest means as complete relaxation of the body as obtainable. This can best be done in bed in a well ventilated and quiet room, or sleeping porch. Sitting in a chair and talking with one's neighbors is not resting. Only a limited number of visits should be allowed. A temperature of 99.5° or over, in the afternoon, calls for rest in bed.

Rest is advisable for all members of the family who are under weight or malnourished. Growing children need a large amount of rest.

Food. Diet should be a balanced one of a sufficient number of calories. A balanced diet is one containing the proper proportions of protein, carbohydrates, oils and fats, minerals, vitamins, and water. Instruct the family in regard to the relative values of certain kinds of food. Make teaching consistent with family income and racial dietary habits whenever possible. Teach family new ways of preparing foods.

Milk is an ideal food. If possible, the patient should have a quart a day, preferably not raw; this may be taken alone, or in soups, sauces, etc. Growing and underweight children should have a quart of milk per day, if possible.

Fresh Air. Patients and underweight children derive the most benefit from fresh air by sitting or lying before an open window. Sleep with windows open. A window raised but one inch is better than a tightly closed one. Demonstrate ways of ventilating without draughts. Patients with an elevation of the afternoon temperature should be advised not to get fresh air by automobiling or walking.

Sunshine. Sunshine has a stimulating effect on the mental as well as the physical processes. It is the one generally accepted treatment of bone and glandular tuberculosis. Exposure should be given only under the direction of a physician. There is still a difference of opinion regarding the treatment of pulmonary tuberculosis by exposure to the direct rays of the sun. It should be recommended by the physician only. When instructing the mother or other responsible member of the family in supervising the exposure of the child, emphasis should be placed upon the importance of adhering strictly to the orders of the physician, especially as to the length of time during which the body is to be exposed.

Care of Teeth. Teeth should be brushed daily. Dental care at least every six months.

Care of Dishes. Open pulmonary tuberculosis—boil dishes after using. Keep in a separate place in patient's room or in the pantry.

Apparently cured pulmonary tuberculosis, glandular tuberculosis, tuberculosis of the bone (unless lesion is in the mouth)—make no distinction from the other members of the family.

DISINFECTION

Concurrent

Sputum—Collect in paper napkins or toilet paper and burn.
Dishes—Keep separate and boil after using.
Linen—Boil after using.

Terminal

Careful Patient. The following instructions may be given the family upon removal of an open case of tuberculosis from one room to another, removal to hospital or sanatorium, or upon death of the patient:

Boil bed linen, pillow cases and blankets for at least ten minutes. Air and sun the mattress and pillows out of doors for at least one day for each side.

Burn soiled padded bed coverings which cannot be boiled. When not soiled, air and sun in the same manner as mattress and pillows.

Air and sun carpets and rugs for two days. Then clean thoroughly out of doors. Wash furniture, woodwork and floor with soap and water. Air and sun room for two days.

Careless Patient. Boil bed linen, pillow cases, for at least ten minutes. Soak pillows and blankets in soapy water over night, wash and dry in sun for several days.

Burn padded bed coverings that cannot be boiled. Burn mattress and floor coverings, unless they can be steam sterilized. In many cases it is against the law to make over such a mattress.

Wash the walls, floor and furniture with soap and water. It would be well to repaint the walls and woodwork. Air and sun the room for two days.

In all cases, the nurse should return the second or third day to see that her instructions are being carried out.

A copy of the printed instructions for terminal disinfection should be left in the home, but should in no way take the place of careful verbal instruction by the nurse. In lodging houses, the instructions should be given to the landlord and the person responsible for the care of the rooms.

Where the nurse is unable to secure cooperation in carrying out the instructions given, the case may be referred to the health officer.

NURSES' FIELD RECORDS

The purpose of the nurse in community health work, as related to tuberculosis, is threefold: to assist in the cure of tuberculosis, the prevention of tuberculosis and the promotion of health. The notation of her visit should clearly indicate the

nature of her teaching or other nursing service which may contribute toward the attainment of this threefold purpose.

Why is a visit necessary?
What service was rendered during the visit?
Why is a return visit necessary?

These are questions which the nurse should ask herself before going into the home. The answer should be found on her record.*

Avoid such notations as the following:

"Uncooperative" (who is responsible for such a condition—the patient, nurse, or both?)
"Condition good" (such a positive statement is the prerogative of the physician)
"Refuses to return to clinic" (give reason for refusal)
"Does not see the need for examination" (has the nurse exhausted every resource for helping him to see the need?)
"Advisory visit" (too general to answer any of the above questions).

The nurse's record should give a complete picture of the physical, mental, social, and economic status of the family over the entire period during which nursing service was rendered. The record should also give a complete picture of the nursing service rendered. Sociological data should be accurate and complete. This material may be valuable to official agencies in studying community health needs and may help in determining the future health program.

LITERATURE FOR PATIENTS

Pamphlets on tuberculosis are a valuable adjunct to the nurses teaching in the home. Many times the nurse will be able

* We call attention to the tuberculosis record card approved by the Records Committee of the N.O.P.H.N., and published by Mead and Wheeler, 1022 South Wabash Avenue, Chicago. This card is not copyrighted and may be adapted to local needs.

to reenforce certain phases of her teaching by referring to special items in such pamphlets as "What You Should Know About Tuberculosis." This and similar publications of the National Tuberculosis Association may be obtained from the state or local tuberculosis association.

The nurse should make it clear to the patient and family that this literature is being dispensed as a reference and guide to the patient, to which he may refer for guidance in the nurse's absence. It should not be given to the children to play with. The importance which the *nurse* attaches to any literature given the patient will in a measure be reflected in the manner in which it is used by the patient.

Appraisal of Nursing Service

IN estimating the adequacy of a community nursing service, it is important to meet the requirements of a minimum quantitative standard for such items as field nursing visits, clinic attendance, sanatorium admission, preventoria, open-air classes, and day camps, based on the local tuberculosis death rate. Such an appraisal form has been prepared for the use of health officers in city and rural communities and may be obtained from the Committee on Administrative Practice of the American Public Health Association, New York, N. Y.

Equally important in the evaluation of the nursing service is the measurement of those less clearly defined activities which, together with the above appraisal, help to determine the *quality* of the nurse's work. The following questions suggest themselves in relation to the rehabilitation of the tuberculous family:

To what extent has the nurse been instrumental in securing the correction of such defects as diseased tonsils, decayed teeth, malnutrition, defective vision?

What change has been effected in the family dietary to meet the body needs more adequately?

Is the family spending its income more wisely?

Has the nurse secured satisfactory readjustments in family relationships through the cooperation of other family welfare agencies?

How effectively has the teaching of the sanatorium been carried over into the home as a result of supervision of the family and patient? Over how long a period of time?

Has the selection of a suitable occupation for the ex-sanatorium case been the result of the nurse's guidance?

Has the nurse's teaching been "positive" rather than negative, so that the patient and family have a healthy mental attitude toward tuberculosis?

How many cases of tuberculosis have been found in the course of her child welfare, maternity, communicable disease and bedside care activities?

Has examination of contacts been secured?

These and many other factors should be considered in conjunction with the statistical report of the nursing service.

The Nurse and Clinic Service

IT is well to remember that any lasting benefit which may be conferred upon the tuberculosis patient under the present method of treatment of the disease will be the result of a process of education. The clinic is a strategic place for coordinating the teaching of the physician and the nurse in such a way that the lessons taught will be of lasting value.

Efficient management of a clinic necessitates the observance of a certain number of routine procedures, the most outstanding of which follow.

GENERAL MANAGEMENT

The clinic should be set up and ready to function *promptly* at the time when patients have been told to arrive. A definite time should be stated for clinic hours. Exceptions to the policy of not admitting patients after closing hour may be made in special instances when the patient gives a very good reason for being late, provided the exception has not been made several times for the same patient.

Each nurse should know and understand the specific duties required of her before the clinic starts. Courtesy, friendliness, sympathy, dignity, poise, and a sense of humor, are indispensable in gaining the confidence of the patient.

The nurse should see that the patient clearly understands the physician's instructions before leaving the clinic.

Patients should be seen by the physician in the order in which they arrive at the clinic. In a free clinic, it is not possible to allow patients to choose their physician.

Paper bags may be used as receptacles for soiled paper napkins, tongue depressors, and waste pledgets of cotton. They may be suspended from small hooks at convenient places.

Assure the patient of privacy in undressing and dressing. It is desirable to have only one patient at a time undressed and waiting for examination. A nurse should remain in the examining room when female patients are being examined.

Thoroughness in all procedures is essential, regardless of the number of patients attending the clinic. The patient is interested primarily in the kind of treatment which he receives and not in a large clinic attendance. His interest in returning will depend upon this first impression.

If there are several nurses on duty at the clinic, those ad-

mitting patients and taking temperatures may leave for the field at the close of the admitting hour or after the temperatures have been taken. This helps to reduce the cost of the clinic service.

If the clinic service is confined to tuberculosis, the nurse may be guided in her new admissions by admitting only those cases giving a history of symptoms suspicious of tuberculosis or having been in close contact with the disease. It is well to determine a territorial boundary line for the area which the clinic is prepared to serve.

Blood for Wassermann test should be taken by the physician. Tuberculin test should be given by the physician. When the test is given by a nurse it should only be after she has had training in this particular field to a point of efficiency and the test should only be done at the request and under the direct supervision of the clinic physician.

ROUTING PATIENT THROUGH CLINIC

The efficiency of the nurse in charge of the clinic is reflected in a large measure in the smooth running of the clinic. The following suggestions are made with this objective in mind:

On admission to the clinic give patient a slip with his name and a number indicating the order of his arrival and the order in which he should be examined.

Take temperature, pulse, height, and weight and record on patient's history. The time of weighing is ideal for discussing rest, diet, and exercise and their effect on the patient's weight.

History. With a new patient, the nurse may obtain the sociological data, history of exposure, and subjective symptoms. A satisfactory contact with the patient at this time will determine in no small measure his willingness to return to the clinic.

If the patient has previously attended the clinic, obtain a history

of events related to his physical condition since the last visit to the clinic. The following are examples:

Ability to work—full or part time.
Expectoration—amount, time of day, blood-streaked.
Hemorrhage—amount, color.
Illnesses.
Present symptoms most annoying to patient.
Appetite, sleep, exercise.
Social problems in the family.

Perhaps the simplest method of giving a picture of the patient's condition (subjective) is to record only positive symptoms and conditions which have a bearing on the physical condition, and state that history is otherwise negative. This calls for a broad knowledge of the most important factors related to tuberculosis and the ability to apply this knowledge in eliciting a complete history from the patient.

Prepare patient for examination.

Examination by Physician. This is the service for which the patient has come to the clinic. It is the ideal time for the physician to instruct the patient carefully in the cure and prevention of the disease. Plenty of time should be allowed the patient to ask questions and receive satisfactory answers from the physician.

Be sure patient understands instructions given before he leaves clinic. Give return date.

Thermometer Tray

Thermometers: mouth and rectal in bichloride or alcohol solution, containers plainly marked "mouth" and "rectal."
Green soap solution.
Pledgets of cotton in container.
Tube of vaseline.
Paper bag for waste cotton.

Wassermann Tray

Luer glass syringe
Needles
Rubber tubing (tourniquet)
Sterilizing basin
Alcohol
Pledgets of cotton in container
Adhesive
Paper bag for waste cotton

Tuberculin Test Tray (Von Pirquet or Intradermal)

- Scarifier
- Syringe
- Needles
- Tuberculin
- Sterilizing basin
- Alcohol
- Pledgets of cotton in container
- Adhesive
- Paper bag for waste cotton

Equipment for Physician's Desk

- Ink (red and black)
- Pens
- Pencil
- Squares of tissue paper in container
- Tongue depressors in container
- Paper bag for used tissue paper
- Flashlight
- Record forms
- Prescription blanks
- Literature for patients
- Specimen bottles
  - Sputum
  - Urine

Special Techniques

HEIGHT AND WEIGHT

WEIGH patient without sweater, overcoat, and overshoes. If there is a gain in weight, make favorable comment. Have the patient supply a reason for gain. If there is a loss in weight, make no unfavorable comment. Discuss with the patient the possible reasons for the loss.

In the case of a child markedly underweight and with other symptoms of malnutrition, make a special note on the record. This will indicate to the nurse the need for special attention to remedy any situation in the home which may be responsible for this condition. Diseased tonsils, inadequate or improper diet, bad eating habits, nagging parents, lack of

proper amount of rest, poor ventilation, may be causative factors.

TAKING THE HISTORY

Insure privacy to the patient. Ask questions in a friendly and interested manner. Observe patient's reaction to certain questions. He may not clearly understand, or may object to giving the correct answer. The history should be a clear and consecutive picture of the patient's condition since the onset of the disease.

Be sure statements are relative to the question. For example, under item, "Reason for coming to clinic," do not use such statements as "examination" or "advised by nurse." These may, indeed, be the patient's reason for coming but the nurse in getting the history should search further for the underlying causes, such as are expressed in the terms:

"Loss of weight and blood-spitting"
"Exposure to tuberculosis"
"Referred by family physician"
"Member of family ill with or died of tuberculosis."

Research is sometimes necessary in obtaining a satisfactory history of exposure to tuberculosis. If the nurse senses a hesitancy on the part of the patient in using the term tuberculosis, she may obtain the information more readily by using such terms as "lung condition" or by describing the symptoms of tuberculosis which some member in the family may have had who died of "pneumonia."

Young adults sometimes report parents "living and well." A chronic fibrotic type of tuberculosis may remain in an apparently stationary condition for years, and, because of this, the parent may seem normal to the child.

Inquire about the health of relatives if no history of exposure is obtained in the immediate family. Children sometimes live with a tuberculous relative long enough to become infected. Boarders may be a source of infection. Source of the milk supply at present, and occasionally the past sources, are of interest in glandular tuberculosis.

CLINIC REPORT TO FIELD NURSE

The following may be included in the clinic report to field nurse:

> Diagnosis, temperature, weight, noting gain or loss, orders, physician's findings that may be of value in her teaching in the home; *e.g.*, evidence of activity of lesion, ability to work, amount of rest, special diet, date of return to clinic.

LABORATORY REPORTS

Reports on examination of sputum, blood, urine, etc., should be copied on the clinic record as soon as received.

LAMP TREATMENT

Treatments are given only upon the written recommendation of the physician. The order should specify the part of the body to be exposed, time of exposure, and the distance between lamp and body. Patient and nurse wear dark glasses.

Records

CLINIC records provide valuable material for the epidemiological study of tuberculosis. They should be accurate, complete and systematized to meet the needs of all groups interested in

the control of tuberculosis. The following are the essentials in a simple record system:

A central card index file containing a separate card for each patient. Cards and clinical records are filed alphabetically. The card may have space for patient's clinic number, name, present and previous address, date of birth, name of father and mother, nationality, date of admission, date of and reason for discharge, diagnosis. Keep active and discharged cases separate. Keep record of patients in sanatorium in a separate place in file. Return to active file when patient leaves sanatorium and comes to clinic.

A daily summary should be kept; this may include:
No. of patients at clinic
No. of new patients at clinic
No. of old patients at clinic

Under "new patients" list:
No. with diagnosis of far-advanced and pulmonary tuberculosis
No. with diagnosis of moderately advanced pulmonary tuberculosis
No. with diagnosis of minimal pulmonary tuberculosis
No. with diagnosis of childhood type of tuberculosis
No. with diagnosis of tuberculous cervical adenitis
No. with diagnosis of bone tuberculosis
No. with diagnosis of other types of tuberculosis (specify)
No. with diagnosis other than tuberculosis (specify)
No. of contacts
Age—under 1 year
1 to 5 years
6 to 14 years
No. of hours spent in clinic by nurse
No. of hours spent in clinic by doctor

REPORT ON NURSE'S RECORD

The report of the clinic findings and recommendations may be noted on the nurse's record in red ink. When the clinic serves the patients supervised by a number of nurses in the field, a report should be sent to the supervisor, or to each nurse when there is no supervisor. This gives the nurse an estimate of the effectiveness of her teaching and indicates special points in the patient's daily regimen which need emphasis. The phy-

sician's findings and recommendations are essential to the nurse in formulating her program in the home.

REPORT FROM HOSPITALS AND CLINICS

A written request should be made for reports on patient's condition while under care in a hospital or clinic. This report should be filed with patient's clinical record.

SANATORIUM APPLICATION

Application for sanatorium care should be filled out by the clinic physician. When the patient is unable to assume financial responsibility for such care, the nurse should assist in making the arrangement.

Sanatorium Care

THE length of time a patient remains in the sanatorium depends in no small measure upon the kind of instruction he has received from the nurse previous to admission. All her efforts in getting the patient examined and securing his consent to accept sanatorium treatment may be completely frustrated if he does not understand what will be expected of him, and if provision is not made for the care of his family or dependents.

INFORMATION ABOUT SANATORIA

The nurse should know: names and location of all state, local, and private sanatoria to which patients in the nurse's district are eligible for admission; requirements for admission (residence, financial status, color, age, sex, stage of disease); admitting days and hours; visiting hours; clothing required (to avoid appearance of almsgiving, nursing organization should turn over clothing supplies to be issued through the relief

agency); approximate cost of transportation; how to apply for admission.

GENERAL ADVICE TO PATIENT AND FAMILY

The sanatorium is a "school" where the patient may learn how to get well. Sanatorium rules are made for the benefit of the patients. These rules will oblige him to do many things that he was not accustomed to doing at home. It would be impossible in many instances to adopt such a regimen in the home. With the right mental attitude, viz., a determination to get well, it is no hardship to carry out the treatment prescribed, for he will find that all the other patients are doing the same thing.

Rest gives the diseased tissue a chance to heal and the body an opportunity to build up a resistance to the infection. Therefore he will find that provision is made to have it in abundance. To provide ideal conditions for resting, visitors are allowed on certain days only, and visiting hours are limited to a definite period.

The food may be different from that to which he is accustomed at home. Assure him that the menu of the sanatorium provides the food elements essential to body growth and repair. It is most important that he learn which foods are good for him, so that he may continue this part of the "cure" when he returns home.

The amount of exercise which he will be allowed will be determined by his physician. While at home, many patients consider walking the least strenuous exercise. A new interpretation may be given by explaining that "sitting up in bed" is exercise in the treatment of tuberculosis.

Entertainment will be provided to meet the patient's needs. The family should cooperate with the patient in making the adjustment to his new environment.

PROVISION FOR THE FAMILY

If the patient is the bread-earner (father or mother) in the family, provision must be made for the care of the dependent members until the patient is able to return to work. The problem should be turned over to a social agency. In communities where there is no private family welfare agency, application should be made to the local official welfare agency, relatives, church, local Red Cross, etc.

The Ex-Sanatorium Case

THE sanatorium has taught the patient the essential factors in the treatment of tuberculosis in the sanatorium. The nurse should show him how to adapt this teaching to the home. To do this, it is essential to visit the patient *as soon as possible after discharge* from the sanatorium—at least within a week. A delay in visiting may mean an adaptation by the patient to the home environment rather than an adjustment of home conditions to meet his needs. Such a change calls for education of the entire family. A written outline of the daily regimen is helpful in many instances.

REPORT TO SANATORIUM ON DISCHARGED CASES

When the local public health nurse is requested to report regularly to the sanatorium on discharged cases, a mimeo-

graphed or printed form can be used to advantage. Unless otherwise stipulated by the superintendent of the sanatorium, the following items should be included on such a form:

Name
Present address
Old address (if patient has moved since leaving sanatorium)
Occupation—part or full time
Weight Afternoon temperature
Symptoms (hemorrhage, sputum, night sweats, loss of appetite, etc.)
Date of last examination
Report of last examination
Remarks
Signature

OCCUPATION FOR THE TUBERCULOUS PATIENT

The following factors should be considered in advising the tuberculous patient regarding occupation:

Is the workroom dark, damp or poorly ventilated? Does it necessitate heavy lifting? Is there a possibility of excessive fatigue? Are the hours long? Is there a dust hazard? Stone and metal dusts should be avoided wherever possible. Does it involve handling of food? Does it mean caring for small children? His old job requires less adjustment than a new one and should be recommended if it meets the requirements of the patient's condition. Advise against an outdoor job that requires heavy lifting or exposure to all kinds of weather.

The patient with pulmonary tuberculosis should be advised to consult his physician before engaging in any occupation.

REFERENCE READING FOR THE TUBERCULOSIS NURSE

An understanding of the nature of tuberculous disease, a knowledge of the terminology peculiar to it, and the accepted

methods of treatment are essential in the equipment of any public health nurse. The following are suggested:

Books

Rules for Recovery from Tuberculosis, Lawrason Brown, M.D.

Tuberculosis, a Primer and Philosophy, McDugald McLean, M.D. (Very practical treatises to suggest to patients.)

The Lungs, and the Early Stages of Tuberculosis, Lawrason Brown, M.D., and Fred H. Heise, M.D.

Diagnosis and Treatment of Pulmonary Tuberculosis, John B. Hawes, 2nd, M.D., and Moses J. Stone, M.D.

Tuberculosis, Fred G. Holmes, M.D.

The Child and the Tuberculosis Problem, J. A. Myers, M.D.

Pamphlets

What You Should Know About Tuberculosis, National Tuberculosis Association.

Air and Sunshine, National Tuberculosis Association.

Diagnostic Standards (10th ed., 1935), National Tuberculosis Association. (A clear statement of the terminology in tuberculosis, diagnostic measures, treatment, etc.)

Selected lists of books and pamphlets on tuberculosis will be sent on request to National Tuberculosis Association, 50 West 50 Street, New York.

REPORT TO SOCIAL AGENCY *

From ..... Date .....
(Name of nursing organization)

To .....
(Name of social agency)

.....
(Name of head of family)

.....
(Address)

Family	Date of birth	Occupation	Health (diagnosis, nutrition, etc.)	Income reported by family
M Joseph	1887	Barber	Wife reports "not very strong"	.....
W Mary	1890	Housewife and laundress	Underweight, otherwise physical examination negative	$4 week
c Anna	1910	Corset factory	Minimal pulmonary tuberculosis. Sanatorium recommended	$18 week
c John	1919	School	Positive Von Pirquet. Underweight	.....
c Alice	1923	School	Positive Von Pirquet. Underweight. Diseased tonsils	.....
c James	1926	Home	Tuberculosis of Tracheobronchial glands	.....

Reasons for referring:

Husband deserted family three years ago, whereabouts unknown. Has not contributed to support of family since that time. Anna will not consider sanatorium care until financial arrangements are made to take care of the family. Budget analysis shows family needs $31 a week to provide adequately for their health needs. John is tall for his age and because of this has been accepted into a gang of older boys whose influence is harmful. Stays out late at night.

Signed.....
(Nurse)

.....

Date.....

Report on..... .....
(Name of family) (Address)

(Space for Report)

Signed.....(Visitor)

.....(Agency)

* See page 13.

Request for Hospital or Clinic Report

Date.....

To.....
(Name of Institution)

Kindly send us a report of the physical findings, diagnosis and recommendations on

....
(Name) (Address)

who has been under care at your institution.

He (she) is under supervision at the Doe Tuberculosis Clinic at the present time.

Signed.....
(Nurse in charge of clinic)

(Return report to be torn off on perforated line)

.....

Date.....

To.....
(Physician in charge of clinic)

.....
(Address)

The following is a report on

....
(Name) (Address)

(Space for report)

Signed.....

.....
(Name of Institution)

Printed in U. S. A.